Abstract

Encoding Method and Apparatus

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A method of encoding an digital image (502) by a discrete wavelet transform (DWT) to a predetermined level of decomposition on a block by block basis, each block (1501, 1504, 1506) having a specified size in number of coefficients, is disclosed. The image is divided into tiles, each having dimensions required to produce the number of

10 coefficients in a first dimension of the transformed block at the predetermined level of decomposition, and less than the number of coefficients in a second dimension of the transformed block. At a particular DWT level, tiles are decomposed. HH, HL and LH subband coefficients are accumulated to form blocks of specified size, and these are encoded to a bit stream (402). A predetermined number of associated LL subband

15 coefficients are similarly accumulated, the process performed recursively per DWT level until the predetermined decomposition level is attained, and the corresponding LL subband coefficients encoded to the bit stream (402).